

IN THE CLAIMS

Please cancel claims 11-18 without prejudice.

Please amend the following claims.

1. (Previously Presented) A microelectronic assembly comprising:
a substrate having bonding pads disposed on a mounting surface thereof, the bonding pads including a ferromagnetic material thereon;
a solidified solder disposed on the bonding pads;
a surface mount component bonded to the substrate by way of the solidified solder and including a magnetic layer disposed on a substrate side thereof, the magnetic layer to cooperate with the ferromagnetic material in the bonding pads to establish a magnetic force of a sufficient magnitude to hold the surface mount component on the substrate before and during soldering.
2. (Original) The assembly of claim 1, wherein the surface mount component is a capacitor.
3. (Currently Amended) The assembly of claim 1, wherein the bonding pads on the substrate comprise Electroless Nickel/Immersion Gold (ENIG) ~~ENIG~~ pads, and wherein the ferromagnetic material in the bonding pads comprise nickel.
4. (Original) The assembly of claim 1, wherein soldering comprises a reflow process, and wherein the magnetic layer comprises a magnetic material having a Currier temperature that is above a peak reflow temperature range of the solder.

5. (Original) The assembly of claim 1, wherein the magnetic layer comprises a magnetic material having a remanence adapted to have a minimum impact on a performance of circuits within the SMT component or within the substrate.
6. (Original) The assembly of claim 1, wherein the magnetic layer comprises a magnetic material including at least one of nickel and a ferronickel alloy.
7. (Original) The assembly of claim 1, wherein the magnetic layer has a thickness between about 1 micron and about 5 microns.
8. (Original) The assembly of claim 1, wherein the magnetic layer is one of a continuous layer and a discontinuous layer.
9. (Original) The assembly of claim 8, wherein the magnetic layer comprises sublayers defining a pattern adapted to minimize impact on circuits of the surface mount component from a magnetic field of the magnetic layer.
10. (Original) The assembly of claim 8, wherein the magnetic layer comprises sublayers defining a pattern corresponding to a pattern of the bonding pads on the substrate.
- 11.-18. (Canceled)
19. (Previously Presented) A surface mount component bonded to bonding pads of a substrate by way of solidified solder, the surface mount component including a magnetic layer disposed on a substrate side thereof, the magnetic layer to cooperate with a ferromagnetic material in the bonding pads to establish a magnetic force of a

sufficient magnitude to hold the surface mount component on the substrate before and during soldering.

20. (Original) The surface mount component of claim 19, wherein the surface mount component is a capacitor.

21. (Original) The surface mount component of claim 19, wherein soldering comprises a reflow process, and wherein the magnetic layer comprises a magnetic material having a Currier temperature that is above a peak reflow temperature range of the solder.

22. (Original) The surface mount component of claim 19, wherein the magnetic layer comprises a magnetic material having a remanence adapted to have a minimum impact on a performance of circuits within the SMT component or within the substrate.

23. (Original) The surface mount component of claim 19, wherein the magnetic layer comprises a magnetic material including at least one of nickel and a ferronickel alloy.

24. (Original) The surface mount component of claim 19, wherein the magnetic layer has a thickness between about 1 micron and about 5 microns.

25. (Original) The surface mount component of claim 19, wherein the magnetic layer is one of a continuous layer and a discontinuous layer.

26. (Original) The surface mount component of claim 25, wherein the magnetic layer comprises sublayers defining a pattern adapted to minimize impact on circuits of the surface mount component from a magnetic field of the magnetic layer.

27. (Original) The surface mount component of claim 25, wherein the magnetic layer comprises sublayers defining a pattern corresponding to a pattern of the bonding pads on the substrate.

28. (Original) A system comprising:

a microelectronic assembly including:

a substrate having bonding pads disposed on a mounting surface thereof, the bonding pads including a ferromagnetic material therein;

solidified solder disposed on the bonding pads;

a surface mount component bonded to the substrate by way of the solidified solder and including a magnetic layer disposed on a substrate side thereof, the magnetic layer being adapted to cooperate with a ferromagnetic material in the bonding pads to establish a magnetic force of a sufficient magnitude to hold the surface mount component on the substrate before and during soldering; and

a main memory coupled to the microelectronic assembly.

29. (Original) The system of claim 28, wherein the surface mount component is a capacitor.

30. (Original) The system of claim 28, wherein the bonding pads on the substrate comprise ENIG pads, and wherein the ferromagnetic material in the bonding pads comprise nickel.